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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/532,505	04/25/2005	Christian Grimmiger	R.303665	6739

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EXAMINER

GIMIE, MAHMOUD

ART UNIT PAPER NUMBER

3747

DATE MAILED: 11/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/532,505

Applicant(s)

GRIMMIGER ET AL.

Examiner

Mahmoud Gimie

Art Unit

3747

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-19 and 24 is/are rejected.
- 7) ☒ Claim(s) 20-23 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 4/25/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 15 and 20 objected to because of the following informalities: "means canceling" should be corrected as --means for canceling--. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 13-19 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by DE 10123911 A1.

DE 10123911 A1 discloses a pressure booster for a fuel injection device, comprising a piston-shaped pressure boosting element (86,87) that is accommodated in a housing and divides a working chamber (35) and a differential pressure chamber (38) from each other, a control line (32) connecting the differential pressure chamber (35) to a high-pressure source or to pressure-relieve it into a low-pressure region, an annular insert (91) in the housing, a return spring (39) acting on the piston-shaped pressure boosting element (86,87), the return spring (39) resting against the annular insert (91), and a damping throttle (93,95) in the insert (91) via which fuel flows from the working chamber (35) of the pressure booster (86,87) into a hydraulic chamber (94) when the pressure in the differential pressure chamber (38) is relieved, see figures 1-9.

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Regarding claim 14, wherein a delimiting surface (not numbered) of the insert (91) and a hydraulically effective surface (not numbered) on the piston-shaped pressure-boosting element (86,87) delimit the hydraulic chamber (94).

Regarding 15, further comprising means [for] canceling the action of the damper throttle after the pressure-damping element has traveled a particular stroke distance.

Regarding claim 16, wherein in the idle position of the piston-shaped pressure boosting element (86,87), the insert covers over an annular surface of the piston-shaped pressure boosting element adjoining the hydraulically effective surface.

Regarding claim 17, wherein the insert functioning, as a damping element comprises an outer ring, and an inner ring that delimits a through opening.

Regarding claim 18, wherein the outer ring rests on a support surface of a housing part of the housing.

Regarding claim 19, wherein the outer ring is accommodated in a recess of a wall of the working chamber of the pressure booster.

Regarding claim 24, wherein the insert functioning as a damping element is embodied as disk-shaped and is accommodated in a recess of a first housing part of the housing, see figure 2.

Allowable Subject Matter

4. Claims 20-23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion


5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited references show fuel injectors with damping elements.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mahmoud Gimie whose telephone number is 571-272-4841. The examiner can normally be reached on Monday-Friday between 7 a.m. -3:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen K. Cronin can be reached on 571-272-4536. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MG


MAHMOUD GIMIE
PRIMARY EXAMINER